Macmillan McGraw-Hill *Math Connects*, Grades 3-5

Degree of Evidence regarding the Standards for Mathematical Practice:

Minimal Evidence

Summary of evidence:

- 1. Make sense of problems and persevere in solving them. There is minimal evidence of this practice throughout this series. Each lesson has one open-ended question and one reasoning question located in the student practice section, but evidence of students making sense of the problem, explaining, analyzing, or persevering in problem solving is very limited. There is evidence of multiple approaches being given as an example, but student practice is limited to applying the standard algorithm.
- 2. **Reason abstractly and quantitatively**. There is minimal evidence to support this practice throughout this resource. There is some evidence found to support representing scenarios symbolically, but most of the student work involves applying the standard algorithm. Reviewers cited very little evidence to support this practice.
- 3. **Construct viable arguments and critique the reasoning of others**. There was minimal evidence found of this practice throughout the series. The reviewers cited two examples of openended problems. There is no evidence of student discourse to argue or critique the reasoning of others.
- 4. **Model with mathematics.** There was minimal evidence found for this practice. Many examples of real-world situations were cited in the Grade 3 materials, but the practice is underdeveloped in Grades 4 and 5. This resource lacks evidence for student opportunities to utilize models/tools, analyze, draw conclusions, refine, revise, or answer in context of a situation.
- 5. **Use appropriate tools strategically.** There is minimal evidence for the development of this practice. Evidence was found to support the use of a variety of tools, (counters, base ten blocks, fraction bars and number lines). Although in Grade 5, the text consistently has students use the standard algorithm with using only a paper-pencil method. The reviewers found little evidence of students using appropriate tools strategically, or the development of students realizing the strengths and limitations of tools.
- 6. **Attend to precision.** There was little to no evidence found to support development of this practice.
- 7. Look for and make use of structure. There is minimal to limited evidence of this practice throughout this series. Reviewers found little evidence of prior learning referenced or applying prior learning to new learning. No evidence was found for students moving from specific examples to some level of generalization.
- 8. Look for and express regularity in repeated reasoning. There is minimal evidence of this practice in the sampled materials of this series. A few examples of making generalizing form patterns were cited (e.g., patterns when multiplying by multiples of 10, 100, and 1000). No evidence was found of student opportunities to finding short cuts for themselves. This practice is consistently underdeveloped throughout this series.